AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A processor-implemented method of selectively sharing a plurality of distributed access-controlled documents, comprising:

a plurality of content providers cooperating to create a privacy-preserving index structure; grouping the content providers into a plurality of privacy groups;

passing a content vector from a first content provider in a privacy group of the plurality of privacy groups to a second content provider in the privacy group of the plurality of privacy groups;

the first and second content providers operating on the content vector with a randomized algorithm;

sending a plurality of content vectors to a designated host, each content vector of the plurality of content vectors corresponding to a respective privacy group of the plurality of privacy groups;

aggregating the plurality of content vectors into a materialized index comprising the privacy-preserving index structure;

the privacy-preserving index structure mapping a plurality of keywords representing a content to be shared to the plurality of content providers; and

returning a list of the content providers having a subset of the content to be shared of the access-controlled documents that comprise a set of the keywords that satisfy a query.

2. (Previously Presented) The method of claim 1, wherein the content providers comprise a provider specific search interface for receiving the query and for

authenticating a searcher.

3. (Previously Presented) The method of claim 2, further comprising the searcher submitting the query containing at least one of the keywords to a privacy-preserving index system.

4. (Cancelled)

5. (Currently Amended) The method of claim [[4]] 1, wherein the list of content providers comprises at least 50% false positive content providers.

6. (Currently Amended) The method of claim [[4]] 1, further comprising the searcher submitting the query annotated with an identity for the searcher to a specified content provider on the list of content providers.

7. (Original) The method of claim 6, further comprising the specified content provider authenticating the identity of the searcher for allowing access to the content to be shared.

8. (Previously Presented) The method of claim 7, further comprising the specified content provider returning to the searcher at least one of a plurality of documents that match the one or more keywords.

9. (Cancelled)

10. (Currently Amended) The method of claim 1, wherein ~~the~~ at least one privacy group of the plurality of privacy groups comprises at least three ~~contents~~ content providers.

11. (Currently Amended) The method of claim 1, wherein ~~each of~~ the plurality of content providers ~~is~~ are all grouped into a single ~~one~~ privacy group.

12. (Currently Amended) The method of claim 10, further comprising performing a randomized index construction algorithm to create the content ~~bit~~ vectors for the content providers in the at least one privacy group.

13. (Currently Amended) The method of claim 12, further comprising arranging the content providers in the at least one privacy group in a ring formation.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) The method of claim 13 ~~19~~, wherein content providers in the ring formation sequentially ~~perform the~~ operate on the content vector with a randomized algorithm ~~randomized index construction algorithm on the provider keyword bit vector~~.

22. (Currently Amended) The method of claim 21, further comprising the content providers in the ring formation passing the content vector ~~provider keyword bit vectors~~ and operating on the content vector with a randomized algorithm ~~performing the randomized construction algorithm on the keyword bit vector~~ until the ~~provider keyword bit~~ content vector has completed [[r]] rounds around the ring formation.

23. (Currently Amended) The method of claim 22, further comprising each of the

content providers in the ring formation ORing the passed content vector ~~provider keyword bit vectors into a group keyword bit vector~~.

24. (Currently Amended) The method of claim 23, wherein the ORing ~~the provider keyword bit vectors into the group keyword bit vector~~ introduces false positives in a result returned in response to the query.

25. (Currently Amended) A computer program product having a plurality of executable instruction codes stored on a computer readable medium, for selectively sharing a plurality of distributed access-controlled documents, comprising:

a plurality of content providers comprising a set of instruction codes for cooperating to create a privacy-preserving index structure;

a set of instruction codes for grouping the content providers into a plurality of privacy groups;

a set of instruction codes for passing a content vector from a first content provider in a privacy group of the plurality of privacy groups to a second content provider in the privacy group of the plurality of privacy groups;

a set of instruction codes for enabling the first and second content providers to operate on the content vector with a randomized algorithm;

a set of instruction codes for sending a plurality of content vectors to a designated host, each content vector of the plurality of content vectors corresponding to a respective privacy group of the plurality of privacy groups;

a set of instruction codes for aggregating the plurality of content vectors into a materialized index comprising the privacy-preserving index structure;

the privacy-preserving index structure comprising a set of instruction codes for mapping a plurality of keywords representing a content to be shared to the plurality of content providers; and

a set of instruction codes for returning a list of the content providers having a subset of the content to be shared of the access-controlled documents that

comprise a set of the keywords that satisfy a query.

26. (Previously Presented) The computer program product of claim 25, wherein the content providers comprise a set of instruction codes for receiving the query and for authenticating a searcher.

27. (Currently Amended) The computer program product of claim 26, further comprising the searcher submitting the query containing at least one of the keywords to ~~a~~ the privacy-preserving index ~~system~~ structure.

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Currently Amended) A processor-implemented system for selectively sharing a plurality of distributed access-controlled documents, comprising:

a plurality of content providers that cooperate to create a privacy-preserving index structure;

means for grouping the content providers into a plurality of privacy groups;

means for passing a content vector from a first content provider in a privacy group of the plurality of privacy groups to a second content provider in the privacy group of the plurality of privacy groups;

means for enabling the first and second content providers to operate on the content vector with a randomized algorithm;

means for sending a plurality of content vectors to a designated host, each content vector of the plurality of content vectors corresponding to a respective privacy group of the plurality of privacy groups;

means for aggregating the plurality of content vectors into a materialized index

comprising the privacy-preserving index structure;

means for the privacy-preserving index structure mapping a plurality of keywords representing a content to be shared to the plurality of content providers; and

means for returning a list of the content providers having a subset of the content to be shared of the access-controlled documents that comprise a set of the keywords that satisfy a query.

32. (Previously Presented) The system of claim 31, wherein the content providers comprise a provider specific search interface for receiving the query and for authenticating a searcher.

33. (Currently Amended) The system of claim 32, wherein the searcher submits the query containing at least one of the keywords to ~~a~~ the privacy-preserving index ~~system~~ structure.

34. (Original) The system of claim 33, wherein on receiving the query, at least some of the content providers return a list of filtered documents.

35. (Canceled)